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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/811,526	03/20/2001	Nagahisa Chikazawa	010363	9425

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Westerman, Hattori, Daniels & Adrian, LLP
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EXAMINER

LAROSE, COLIN M

ART UNIT	PAPER NUMBER
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2624

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/28/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 09/811,526	Applicant(s) CHIKAZAWA ET AL.	
	Examiner Colin M. LaRose	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Arguments and Amendments

1. Applicant's amendments and arguments filed 6 November 2006, have been entered and made of record.

Response to Amendments and Arguments

2. Applicant has provided an English-language translation of Applicant's foreign priority document. Therefore, Japanese Patent 2001005951A by Suzuki et al., published 12 January 2001, has been disqualified as prior art, and the previous rejections involving this document have been withdrawn.

In addition, Applicant's amendments to 3, 4, 9, and 13, are sufficient to overcome the previous rejections thereof involving Setlak (U.S. 5,940,526) for the reasons stated by the Applicant in the present Remarks (pp. 9-11). Therefore, the previous rejections that relied upon Setlak have been withdrawn.

Accordingly, Applicant has overcome all of the previous rejections under 35 USC §§ 102 and 103. However, new grounds of rejection have been established below based on newly-discovered prior art.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3, 7-9, and 13-15 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 7,139,414 by Suzuki et al. ("Suzuki '414").

Regarding claims 1 and 7, Suzuki '414 discloses a fingerprint recognizing apparatus (figures 2-3) comprising:

a sensor section (5) mounted on an apparatus body for detecting a fingerprint of an operator;

a cover (7) movable between an open position and a closed position for protecting the sensor section in such a manner that an operator's finger can access the sensor section when the cover is in the open position; and

a contact section (6) arranged on the apparatus body at a position where the operator's finger can easily come into contact therewith during an operator's action to open the cover, the contact section being electrically connected to a ground of the apparatus body,

wherein the contact section is a separate element from the cover (i.e. 6 and 7 are separate elements).

Further regarding claim 7, Suzuki '414's fingerprint apparatus is mounted on a laptop, which serves as a unit casing.

Regarding claims 2 and 8, Suzuki '414's cover (7) has one free end and another base end and is moved between the open and closed positions by means of a hinge provided at the base end of the cover (i.e. this is apparent from figure 2).

Regarding claim 14, Suzuki '414 discloses a mounting plate for rigidly securing the fingerprint recognizing apparatus to the unit casing by means of a screw (see e.g. figure 4: the mounting plate 6, which also serves as the ground contact plate, is rigidly secured by a screw).

Regarding claim 3, Suzuki '414 discloses a fingerprint recognizing apparatus (figures 2-3) comprising:

- a sensor section (5) mounted on an apparatus body for detecting a fingerprint of an operator;

- a cover (7) movable between an open position and a closed position for protecting the sensor section in such a manner that an operator's finger can access the sensor section when the cover is in the open position; and

- a contact section (6) arranged on the apparatus body at a position where the operator's finger can easily come into contact therewith during an operator's action to open the cover, the contact section being electrically connected to a ground of the apparatus body,

- wherein the cover has one free end and another base end and is moved between the open and closed positions by means of a hinge provided at the base end of the cover (i.e. this is apparent from figure 2),

- wherein the contact section is arranged in a recess which is provided on the apparatus body at a position near to the free end of the cover when it is in the closed position (see e.g. figure 4: the contact section – plate 6 – lies in a recess so that the plate is flush with the top of the laptop), and

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wherein the contact section is a separate element from the cover (i.e. 6 and 7 are separate elements).

Regarding claim 9, Suzuki '414 discloses an electrical unit (e.g. figure 2) including a fingerprint recognizing apparatus, said unit comprising:

a unit casing (main body 2);

the fingerprint recognizing apparatus (4-7) mounted on the unit casing for detecting a fingerprint of an operator, the apparatus comprising:

a sensor section (5);

a cover (7) movable between an open position and a closed position for protecting the sensor section; and

a contact section (6) arranged at a position on the unit casing where an operator's finger can easily come into contact therewith when the cover is opened by the operator, the contact section being electrically connected to a ground of the unit casing, and

wherein the cover has one free end and another base end and is moved between the open and closed positions by means of a hinge provided at the base end of the cover (i.e. this is apparent from figure 2),

wherein the contact section is arranged in a recess which is provided on the apparatus body at a position near to the free end of the cover when it is in the closed position (see e.g. figure 4: the contact section – plate 6 – lies in a recess so that the plate is flush with the top of the laptop), and

wherein the contact section is a separate element from the cover (i.e. 6 and 7 are separate elements).

Regarding claim 13, Suzuki '414 discloses an electrical unit (e.g. figure 2) including a fingerprint recognizing apparatus, said unit comprising:

- a unit casing (main body 2);

- the fingerprint recognizing apparatus (4-7) mounted on the unit casing for detecting a fingerprint of an operator, the apparatus comprising:

 - a sensor section (5);

 - a cover (7) movable between an open position and a closed position for protecting the sensor section; and

 - a contact section (6) arranged at a position on the unit casing where an operator's finger can easily come into contact therewith when the cover is opened by the operator, the contact section being electrically connected to a ground of the unit casing, and

 - a ground contact plate (6) which is rigidly connected to the unit casing, the contact section is formed as a part of the ground plate, and

wherein the contact section is a separate element from the cover (i.e. 6 and 7 are separate elements).

Regarding claim 15, Suzuki '414 discloses an information processing unit (figure 2) including a fingerprint recognizing apparatus, said unit comprising:

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a unit casing (main body 2) comprising a data input section and a data processing section for processing data input from the data input section;

a display section (display 9) for displaying letters and images; and

the fingerprint recognizing apparatus mounted on the unit casing for detecting a fingerprint of an operator, the apparatus comprising:

a sensor section (5);

a cover (7) movable between an open position and a closed position for protecting the sensor section; and

a contact section (6) arranged at a position on the unit casing where an operator's finger can easily come into contact therewith when the cover is opened by the operator, the contact section being electrically connected to a ground of the unit casing, and

wherein the contact section is a separate element from the cover (i.e. 6 and 7 are separate elements).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. Claims 4, 5, 10, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 7,139,414 by Suzuki et al. ("Suzuki '414") in view of U.S. Patent 6,208,264 by Bradney et al. ("Bradney").

Regarding claim 4, Suzuki '414 discloses a fingerprint recognizing apparatus (figures 2-3) comprising:

a sensor section (5) mounted on an apparatus body for detecting a fingerprint of an operator;

a cover (7) movable between an open position and a closed position for protecting the sensor section in such a manner that an operator's finger can access the sensor section when the cover is in the open position; and

a contact section (6) arranged on the apparatus body at a position where the operator's finger can easily come into contact therewith during an operator's action to open the cover, the contact section being electrically connected to a ground of the apparatus body,

wherein the cover has one free end and another base end and is moved between the open and closed positions by means of a hinge provided at the base end of the cover (i.e. this is apparent from figure 2), and

wherein the contact section is a separate element from the cover (i.e. 6 and 7 are separate elements).

Suzuki '414 does not appear to show that the free end of the cover is gently curved in such a manner that a central portion thereof is protruded outwardly more than respective side portions thereof, as claimed.

Bradney discloses a fingerprint sensing apparatus (figure 4a) that utilizes a pivotally connected cover disposed over the sensing portions in substantially the same manner as Suzuki '414. Bradney's figure 4a illustrates a fingerprint sensor apparatus design where the free end of the cover is gently curved in such a manner that a central portion thereof is protruded outwardly more than respective side portions thereof, apparently to reciprocate the recess of the sensor. Such a design would have been obvious to those skilled in the art at least for the purpose of fitting the cover within a recessed sensor portion, and Bradney shows this design of a cover for a fingerprint apparatus to be conventional and well-known.

Regarding claim 5, Bradney discloses the recess and the contact section are also gently curved along with a curvature profile of the recess (see the illustration of the cover 50, figure 4a).

Regarding claim 10, Suzuki '414 does not appear to show that the free end of the cover is gently curved in such a manner that a central portion thereof is protruded outwardly more than respective side portions thereof, as claimed.

Bradney discloses a fingerprint sensing apparatus (figure 4a) that utilizes a pivotally connected cover disposed over the sensing portions in substantially the same manner as Suzuki '414. Bradney's figure 4a illustrates a fingerprint sensor apparatus design where the free end of the cover is gently curved in such a manner that a central portion thereof is protruded outwardly

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more than respective side portions thereof, apparently to reciprocate the recess of the sensor.

Such a design would have been obvious to those skilled in the art at least for the purpose of fitting the cover within a recessed sensor portion, and Bradney shows this design of a cover for a fingerprint apparatus to be conventional and well-known.

Regarding claim 11, Bradney discloses the recess and the contact section are also gently curved along with a curvature profile of the recess (see the illustration of the cover 50, figure 4a).

7. Claims 6 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki '414 in view of U.S. Patent 6,382,416 by Gainey.

Regarding claims 6 and 12, Suzuki '414 does not appear to expressly include a locking means for locking the cover (7) in its closed position, the locking means comprising:

- a. a first engaging member provided at the free end of the cover, and
- b. second engaging member provided at a position corresponding to the first engaging member so that the first and second engaging member are mutually engaged with each other when the cover is in its closed position.

Gainey discloses fingerprint recognition apparatus (e.g. Gainey Figs. 3C and 4A) consisting of a locking means (i.e. looped latch lock 34 and the engaging portion of cover 32 depicted in Fig. 3C of Gainey – see also column 2, lines 34-38 and column 5, lines 38-55) used to lock, in a closed position, a movable hinged cover (e.g. Gainey Fig. 3C reference number 32), which protects the fingerprint recognition sensor (e.g. Gainey Fig. 4A, reference number 28).

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See, for example, Fig. 3C of Gainey and column 5, lines 38-55. This locking means includes of the following elements:

- a. A first engaging member provided at the free end of the cover. Observe, in Fig. 3C of Gainey, the lip at the end of cover 32 opposite to hinge 36 (i.e. the free end). This lip engages the latch lock 34 and thus, for the purposes of this discussion, constitutes a *first* engaging member.
- b. Second engaging member provided at a position corresponding to the first engaging member so that the first and second engaging member are mutually engaged with each other when the cover is in its closed position. This is evident from the operation of the latch lock 34 illustrated in Fig. 3C of Gainey and further described in column 5, lines 38-55. This latch lock, since it mutually engages the first engaging member, constitutes a *second* engaging member.

It would be a simple exercise for one of ordinary skill in the art to incorporate the locking means taught by Gainey into the fingerprint recognition apparatus of Suzuki '414. The addition of the locking means secures the cover in the closed position more firmly, thereby further protecting the delicate sensor from inadvertent exposure to potentially harmful entities or forces. Given the simplicity of such a modification and motivated to provide a more robust fingerprint recognition apparatus, it would have been obvious to one of ordinary skill in the art, at the time of the applicant's claimed invention, to incorporate the locking means taught by Gainey into the fingerprint recognition apparatus of Suzuki '414.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Colin M. LaRose whose telephone number is (571) 272-7423. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu, can be reached on (571) 272-7429. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2600 Customer Service Office whose telephone number is (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Colin LaRose
Group Art Unit 2624
18 December 2006

